

Selection of Cutting Tools for Improving Productivity and Cost **Reduction in CNC Machining Centres** 

Date: 26 to 27 March, 2024

Time: 1340 Hrs to 1700 Hrs (Online Mode)

### INTRODUCTION

Milling and hole making operations are an integral part of all metal cutting operations. While using a precision machine tool such as a CNC Machining centre for complex milling and hole making operations, selection of the right cutting tools for the operations is equally critical to producing quality machined parts. Selection of the right cutting tools can result in optimization of cycle time, reduce risks of errors in machining, manage tool costs better and result in the production of a high quality part.

Keeping this in view, IMTMA is organising an online training on Selection of Cutting Tools For Improving Productivity And Cost **Reduction In CNC Machining.** 

#### **FOCUS AREAS**

- Mechanics of Chip Formation and 5 Critical Features of a Cutting Tool
- Options for selecting appropriate Cutting Tool Material
- · Different Cutters Construction and their Features. Cutter selection criteria inserts nomenclature
- Common Milling Operations & 6 important Operational Strategies
- Selection and application of Inserted Milling Cutters, & Solid carbide Endmills
- Why & how drilling operations is most challenging
- Using Drill nomenclature and type of solid carbide drills
- Drilling Strategies with Solid carbide drills
- When & where Modular & Inserted drills offer superior benefits
- Drill Holding, Fixtures and Cutting Fluids Key to Success

#### **KEY TAKE AWAYS**

# At the end of the program, the participant shall be able to:

- Match the various milling/drilling operations with appropriate tool selection
- Selection of Right tool material best suitable for the part material
- Understand the various tool failures & take suitable advance corrective actions
- TScientific approach for avoiding certain type of failures, and for balance, take actions to delay the failure
- Independently take actions to enhance shop output and or reduce CPC
- Reduction in internal process scraps or reworks
- Spread the course learning to other colleagues
- Understand the impact of changes in operating Conditions on Tool Life and productivity

## FEE PER PARTICIPANT (PER LOGIN)

Rs. 6000/-

+18% GST

IMTMA Members/ Micro Companies/ Individuals/ **Educational Institutions / Students/ IMTMA Non** Members/ Others

**USD 240/-Overseas Participants** 

Group Concession: 10% for 3 to 5 and 30% for 6 and more delegates being nominated from the same company

### **FACULTY**

This programme will be conducted by Mr. Pradeep Kumar.

Mr. Pradeep Kumar is a Mechanical engineer, started his career with NTTF where he was training students in Die and Mould making. He was with Kennametal cutting tool manufacturing industry more than 32 years, having experience in the area of sales and marketing of Metal Cutting, Metal forming and Mining tools. During the last 10 years, he was head of knowledge centre in Kennametal and trained more than 20,000 executives in the field of metal cutting tools and its applications.

### For Registration Contact

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# Contact Address

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